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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,193	02/06/2004	Robert E. Ober	J0658.0013	6992

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DICKSTEIN SHAPIRO LLP
1177 AVENUE OF THE AMERICAS 6TH AVENUE
NEW YORK, NY 10036-2714

EXAMINER

CHAVIS, JOHN Q

ART UNIT	PAPER NUMBER
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2193

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/11/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/11/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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rosadob@dicksteinshapiro.com

Office Action Summary	Application No. 10/774,193	Applicant(s) OBER ET AL.	
	Examiner John Chavis	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/22/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-4, 7-11, 14, 15-17, 20-23, 24-26, 29-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Wygodny et al. (7,058,928).

What is claimed is:

Wygodny

1. A method of generating a program trace on a multithreaded processor, the method comprising:

See the title, abstract and col. 4 lines 57-64.

detecting issuance of a first instruction;

See col. 4 lines 12-14 in which the phrase "after calling a certain function" provide for detecting issuance of a first instruction. See also lines 23-25.

generating a first program trace entry for the first instruction,

See col. 5 lines 32-53.

wherein the first program trace entry includes a first thread ID for the first instruction;

This feature is considered inherent to enable identification of the active thread, see col. 9 lines 61-67.

detecting issuance of a second instruction;

See col. 20 lines 55-67.

generating a second program trace entry for the second instruction,

" " " "

wherein the second program trace entry includes a second thread ID for the second instruction; and

" " " "

wherein the first thread ID is different than the second thread ID.

" " " "
See also col. 21 lines 1-2.

2. The method of claim 1, further comprising: **detecting** the occurrence of a thread switch; and

" " " "

performing a synchronization operation in response to the thread switch.

See col. 29 lines 18-25 and col. 31 lines 60-61.

3. The method of claim 2, wherein the synchronization operation further comprises **inserting** a number equal to the number of instructions issued since a previous synchronization operation into the program trace.

See col. 33 lines 44.

4. The method of claim 2, wherein the synchronization operation further comprises **inserting** a program counter into the program trace.

See col. 16 lines 21-29, col. 19 lines 64-col. 20 line 17

7. The method of claim 1,
further comprising periodically
performing synchronization
operations with the program
trace.

See the rejection of claim 2.

Claims 8-11 are rejected as claims 1-4.

As per claim 14, see the rejection of claim 7.

The features of claims 15-17, and 24-26 are taught via claim 1.

Claims 20 and 29 are taught via claim 7.

As per claims 21 and 30, see the rejection of claim 7 in view of claim 4.

See the rejection of claim 2 in view of claims 22-23 and 31-32.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-6, 12-13, 18-19, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wygodny, as taught above, in view of the applicant's choice of conserving memory usage by reducing the size of traces.

5. The method of claim 1,
further comprising **compressing**
the program trace.

Wygodny indicates that traces can consume a lot of space (col. 16 lines 21-29). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to compress traces to conserve space as a

selective choice of design to reduce storage consumption.

6. The method of claim 5, wherein the **compressing** the program trace comprises tokenizing the first program trace entry and the second program trace entry.

The ID's provide for tokenizing of traces.

Claims 12-13, 18-19 and 27-28 are rejected as claims 5-6.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Chavis whose telephone number is (571) 272-3720. The examiner can normally be reached on M-F, 9:00am-5:30pm, EST.

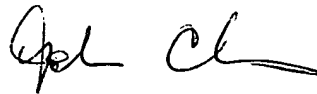
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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JC

A handwritten signature in black ink, appearing to read "John Chavis". The signature is written in a cursive style with a large initial "J" and a long horizontal stroke at the end.

John Chavis
Primary Examiner AU-2193